

Restoring Functional and Utilitarian Solutions of the Railway Station Building in Świebodzice



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*A place is a type of item.
Objects and places define the space,
giving it a geometric personality.*

Yi-Fu Tuan [1]

The aim in separating the architectural space is to create a structure designed to meet specific functional and aesthetic requirements; the construction of space can be done with the use of various methods and activities. The example of the Railway Station in Świebodzice forms a background for finding oneself in space and shaping the space in a multi-directional way.

INTRODUCTION

An architectural object is a place in a separate space. The object-place in space is shaped in a variety of ways, but so that it can only be a framework for events, without a specific definition and manner of execution. Architecture is a form of separating space and constructing it from material and immaterial elements. Man, as a being, fills the behavioral space with his existence, carrying out activities on various levels of behavior. The activities determining the state of habitation are the connotation of various contents linked according to similar principles. The activities determining the condition of the flat shape the layout of the space. The living space is created from an increasing number of material and non-material elements. The result is the convertibility or non-convertibility of the habitable space. The features of a transformable or non-transformable space define the

model of performing activities in a simultaneous or linear manner [2].

Building space is a state of credibility in feeling and perceiving the external architecture of a building. The hyper-reality of state and place in space is a way of defining perceived architecture. Real space reflects reality in a natural way, clearly assigned to the function of an architectural object. The simulacra space distorts deep reality, the external image does not define the signs unequivocally. The reflection of deep reality classified by Jean Baudrillard conceals and distorts deep reality, hides the absence of deep reality and remains unconnected with any reality, remaining a simulacrum, so-called pure simulation [3].

The paper presents an analysis of renovation works as part of the completed project of the reconstruction of the railway station building, showing the construction

of space in a multi-directional and unconventional manner, touching the context of a materially designated place and planned for the function it performs, and the form of the building's architecture, in which the activities determining the condition of the apartment are not related to the surrounding reality, being simulacra of space.

The structure and methods of separating space in consciously formed objects reflect historical processes and philosophical theories, becoming a specific emanation of anthropocentrism. Constructing the structure of an architectural object, allocating space for it and within it, is determined by the purpose, types of activities and used methods [4]. The article attempts to look at the current spatial structure of the railway station in Świebodzice according to the categories of "activities determining the state of living" and "hyper-reality of state and place."



Fig. 1. Bird's-eye view after renovation (source – author)



Fig. 2. Left: Front elevation before renovation (source – author), right: Front elevation after renovation (source – author)

THE DESIGN CONCEPT OF THE COMPLEX

Świebodzice was one of the first cities in Lower Silesia connected with a railway line. In 1837, the construction of a line from Wrocław to Wałbrzych began. The railway station was built in 1869 according to Carl Lüdecke's project. The track system of Świebodzice station forms the letter "S" on a length of two kilometres, which makes it one of the few unique stations located on the curve in the country. The station was built on the basis of Prussian industrial architecture. The façade of the building is made with red facing brick. The building has two clock towers. The concept of the station is a multifunctional system with independent entrances to the premises with the possibility of development for service purposes, entrances to residential premises and to service rooms for the railways. As an example of Polish modernization, the revitalization project was appreciated by the editors of the Onet portal, being among the fifteen most beautiful railway stations in Poland. Functionally, the facility has been divided into three zones. The first zone, on the ground floor, is intended for the needs of the railway. The second zone includes premises for service purposes. The third zone includes two apartments with an independent entrance from the north-west. The fourth zone, on the first floor, contains residential premises (apartments with independent staircases) [5].

1. DIRECTION-RELATED DECISIONS

The building of the railway station in Świebodzice is one of the buildings listed in the municipal register of monuments. Therefore, the conservation works had to be carried out in accordance with the guidelines issued by the Provincial Office for the Protection of Monuments in Wrocław, the Delegation in Wałbrzych.

Conservation guidelines:

- renovation of the façade with the preservation and conservation of brick cladding,
- reconstruction of the roofing,
- replacement of woodwork with the reconstruction of divisions, profiles and colors,

with the admission to use combined windows,

- admission to convert (with reference to the change of function), to a small extent, the window openings into the door openings, the joinery of new openings should be designed with reference to the historical one,
- prohibition to backfill the cellars of the facility,
- during the design process, the basic layout of the main interiors in the building should be kept and their decor should be exposed [5].

Guidelines for the renovation work:

- implementation of vertical insulation of foundation walls, along with drying them,
- execution of horizontal insulation - anti-moisture diaphragm in basement walls,
- renovation of facades and architectural details,
- replacement of the window joinery with a wooden one,
- replacement of the door joinery with a wooden one,
- renovation of wooden entrance doors to the hall of the station building,
- renovation of the surface of stone entrance stairs,
- internal thermal insulation of the building with the Renovario board,
- execution of the roofing,
- protection and repair of the roof structure with the replacement of damaged, destroyed and molded roof structural elements,
- replacement of sheet metal elements of the planking roof, gutters and downspouts,
- installation of roof hatches and chimney benches,
- re-bricking of the most technically degraded wall fragments under the walls or within the walls,
- dismantling of partition walls with a half-timbered structure,
- replacement of electrical, water, sewage and rainwater installations,

- making access around the building of granite blocks, including access for the disabled [5].

Guidelines for the renovation of the facade:

- repair of the damaged architectural details,
- hydrophobic impregnation of a brick facade,
- replacement of sheet metal flashings,
- replacement of joints in the wall,
- reconstruction of brick threads in places being rebuilt and supplementation or replacement of bricks in places showing any defects and gaps in the facade,
- cleaning (grinding) of old, damaged paint coatings from the surface of a brick facade,
- drying and insulation of the wall with the method of hydrophobic blockades [5].

RESEARCH PROCESS

The article attempts to look at the current spatial structure of the railway station in Świebodzice using the method of systemic qualification of space in terms of architectural and non-architectural factors shaping the space.

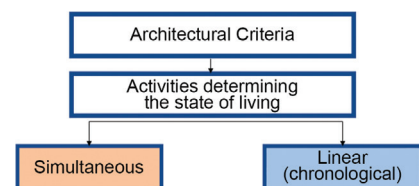


Fig. 3. Models of performing activities determining the condition of living [2, p. 131]

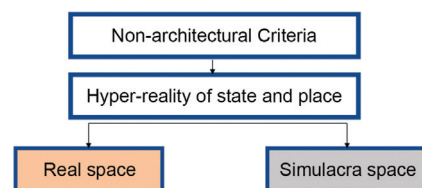


Fig. 4. The space of hyper-reality of the state and place in the building according to the credibility of feeling [2, p. 159]

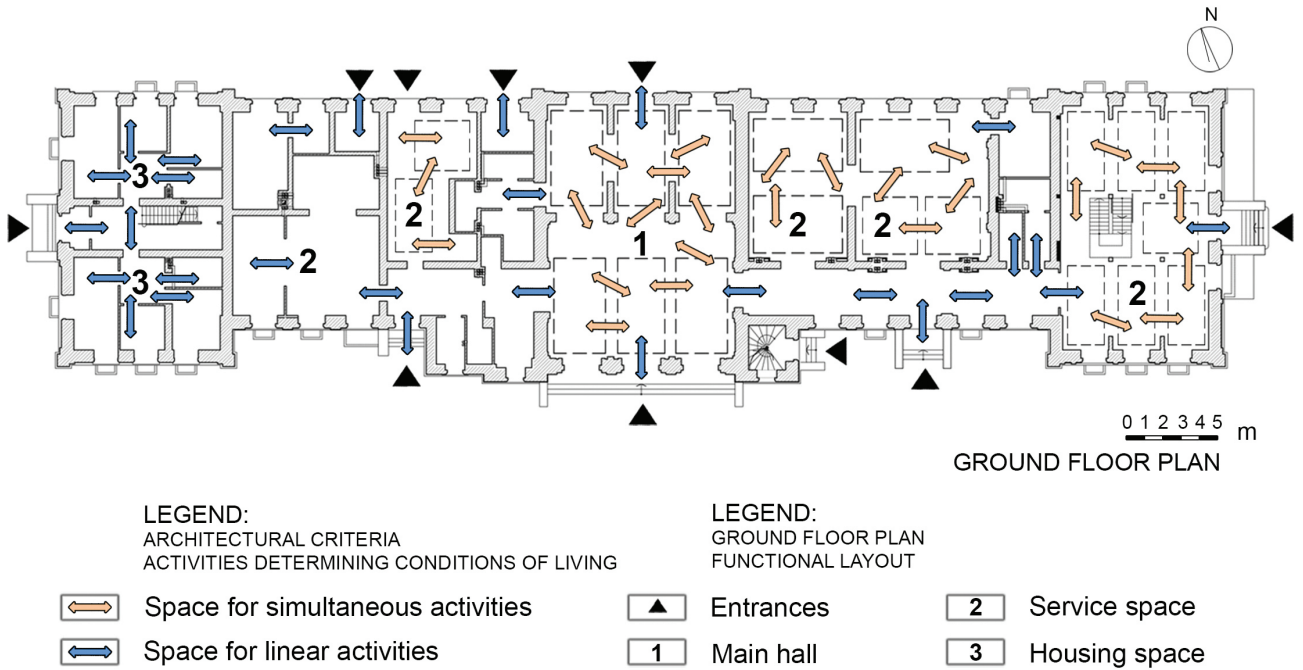


Fig. 5. Ground floor plan – analysis of space in the context of architectural criteria relating to “activities determining the state of living” (source – author)

Architectural factors were based on the criterion of space qualification relating to “activities determining the state of living.” The result is a graphic record of the shape of projections in the living space with simultaneous and linear (chronological) performance of activities determining the condition of living [2].

Non-architectural factors were based on the criterion of the qualification of space in the context of the “hyper-reality of state and place.” The result is shaping forms of living in space in the context of the real and apparent (simulacra) image of the place [2, pp. 159-160].

METHODOLOGY (RESEARCH METHODS)

The method of logical argumentation was adopted for the research [6]. The interpretation of reality was carried out on a selected example in order to understand the existing conditions. The conducted analysis allowed to focus on the meaning and sense of the obtained data. The modeling and simulation method was used for the architectural criterion of “activities determining the state of living.” In situ research was used for the non-architectural criterion of “hyper-reality of state and place.”

The author’s descriptions, explanations and logical interpretation were used as research techniques.

The tools used are architectural documentation and computer programs.

RESULTS (SPATIAL STRUCTURE ANALYSIS)

The analysis was based on the architectural documentation of the station building. The results of the research for the architectural criterion: “activities determining the state of living” show, on the ground floor, the simultaneous character in the main hall space,

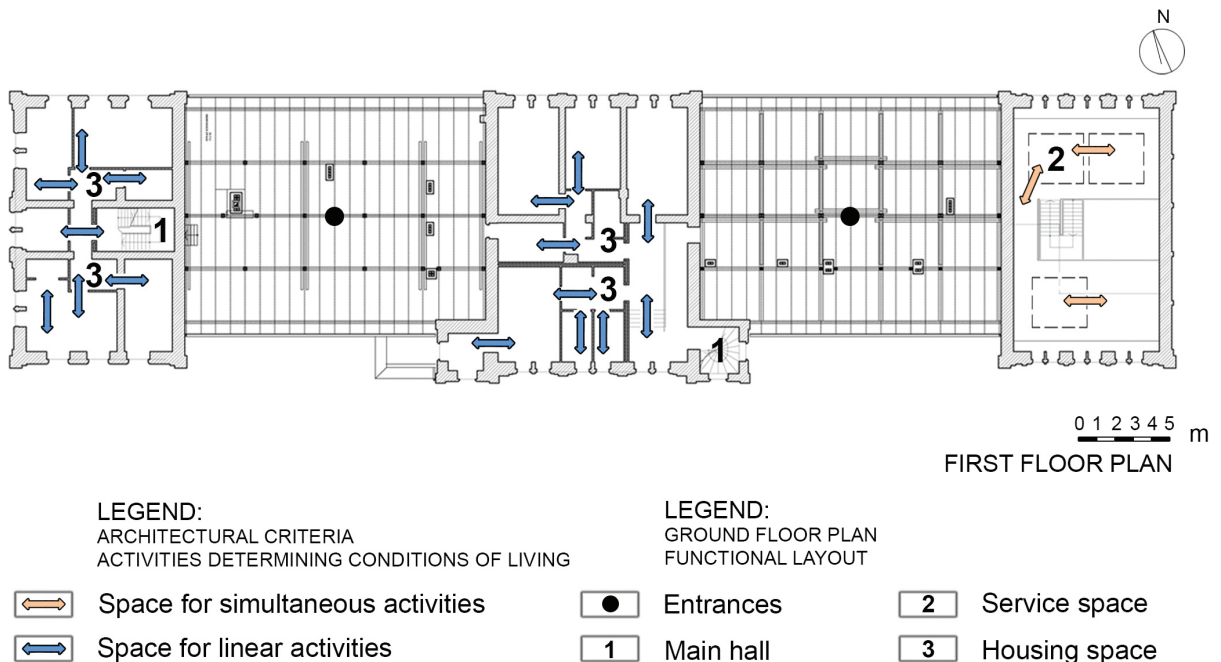


Fig. 6. First floor plan – analysis of space in the context of architectural criteria relating to “activities determining the state of living” (source – author)

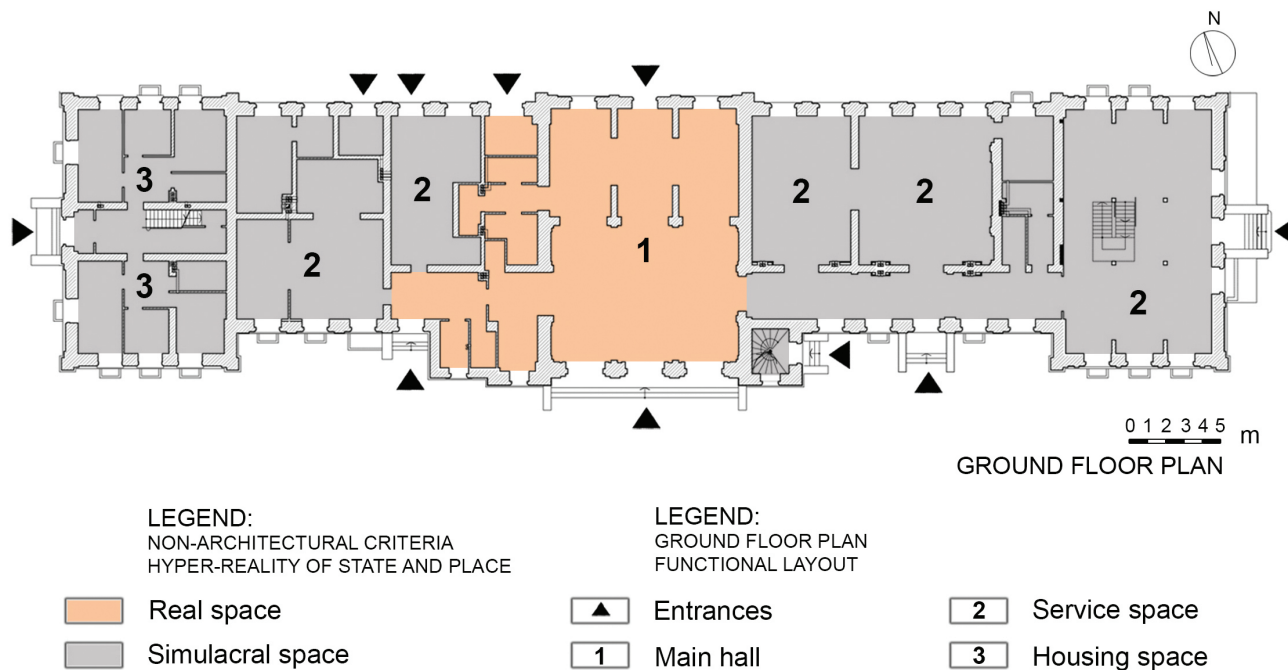


Fig. 7. Ground floor plan – analysis of space in the context of architectural criteria relating to “hyper-reality of state and place” (source – author)

the linear character in the areas intended for apartments, and the simultaneous and linear character in the service zones (Fig. 5). On the first floor, the linear character is shown in zones intended for apartments and the simultaneous for the service zone in the right wing of the station (Fig. 6). The research results for the non-architectural criterion: “hyper-reality of state and place” shows, on the ground floor, the real space that is embodied by the main hall with social facilities and the ticket office area as a traditionally understood image of the place (Fig. 7). On the other hand, the simulacra space distorting the

apparent reality is manifested in the simulation residential space on the ground floor and first floor, and the simulation space for services on the ground floor (Fig. 7, 8).

CONCLUSIONS

The space discovered in the survey of being-in-the-world as the spatiality of the tool-totally always belongs, as its place, to being itself. Naked space is still obscured. Space is scattered into place. However, owing to the global character of the entirety of linking what is spatially handy, this spatiality has its own unity [7]. The statement shows the analysis

of the structure of reality and the immediate environment of man in it, because the place where man lives is the existential space that surrounds him. The multidimensionality and manner of performing activities can be presented in the form of a place for events, so-called framework for events and place in the context of a specifically planned meeting.

Research shows that architecture is a language capable of conveying meaning, as well as organizing the behavior of space users. The most important category determining its shape is simultaneous or linear (chronological) reference to activities determining the

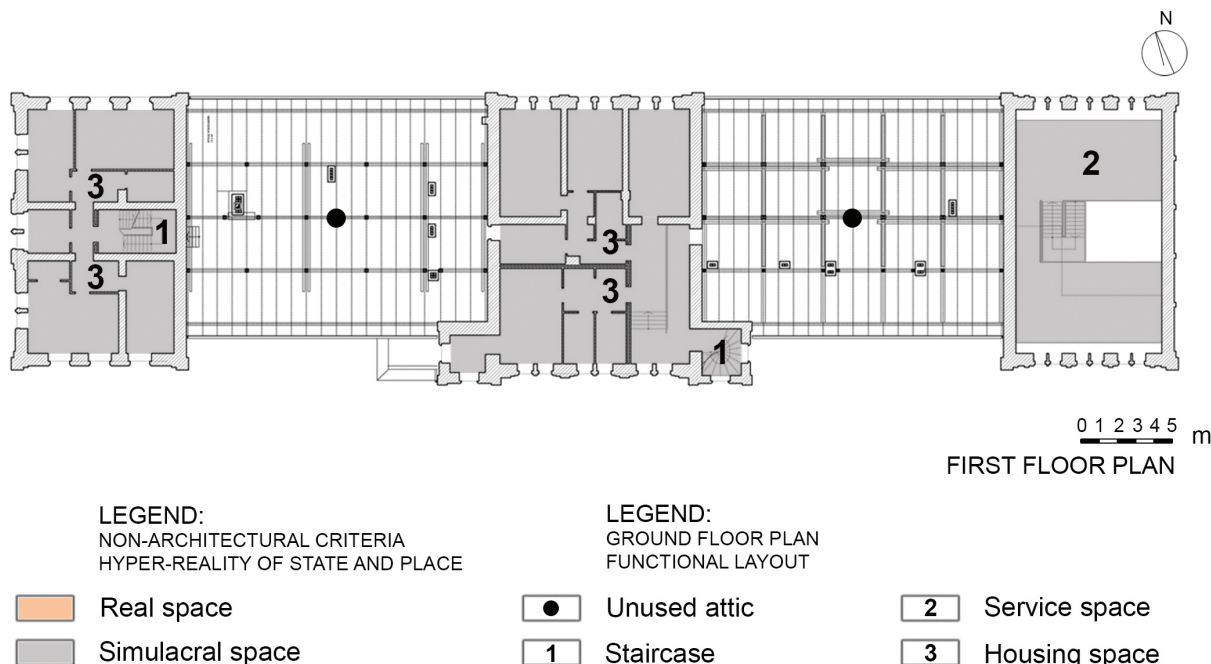


Fig. 8. First floor plan – analysis of space in the context of architectural criteria relating to “hyper-reality of state and place” (source – author)



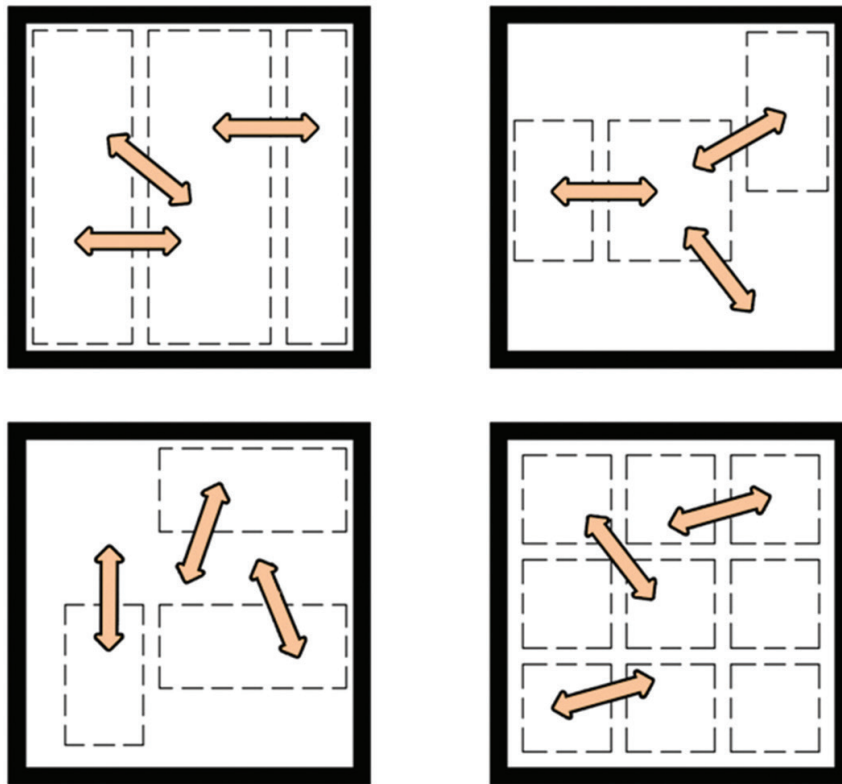


Fig. 9. Space of simultaneous actions (source – author)

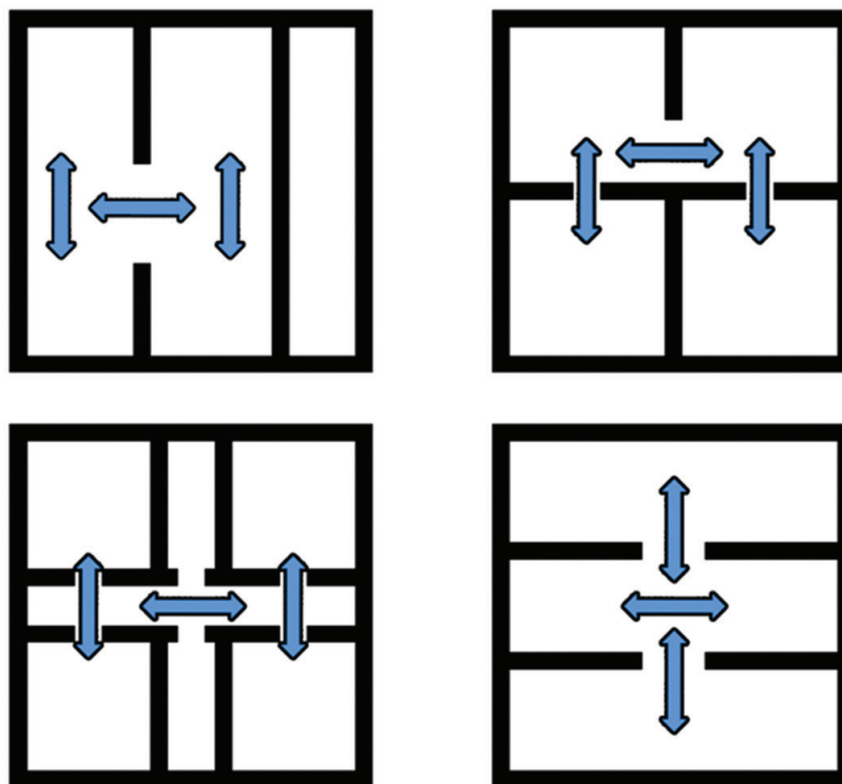


Fig. 10. Space of linear (chronological) actions, scheme (source – author)

condition of living, which has an impact on building space. The conclusions show a form of simultaneity or linearity in the analyzed architectural space, the possibility of shaping and appearance of a simultaneous or linear internal space (Fig. 9, 10). Simultaneous

or linear (chronological) activities determining the state of residence were formulated by G. Nawrot as a model of performing activities determining the condition of living [2, p. 165]. Simultaneous activities occur in buildings where the space is transformable

and the apartments can remain undivided or can be divided according to the needs of users. These flats have a system of internal sliding walls, enabling the internal space to be transformed and thus enabling simultaneous activities, e.g., a residential building in Rotterdam, designed by Bosch [2, p. 137]. Linear activities are most common in non-transformable spaces with monolithic walls, longitudinal arrangement of apartments with a narrow construction course, e.g., a residential building in Neue Vahr in Bremen, designed by Alvar Alto [2, p. 136].

Moreover, architecture of real space refers to spaces adequate to the meaning of the building and activities determining the condition of living in materially designated places. Real space is traditionally understood as buildings erected in accordance with their intended function. The architecture of the simulacral space refers to activities that determine the state of living, that are irrelevant to reality. Jean Baudrillard, formulating theses about simulacra and the blurring of institutions understood in so-far categories of the philosophical metaphor of the institutions of the Building, distinguished successive stages of the image: reflecting deep reality (real space), hiding and distorting deep reality and hiding deep reality that is not related to any reality (simulacral space) [2, p. 159]. In the presented object, the simulacral space is a residential and service space as an adapted space, which the original function did not assume (Fig. 11, 12). Regarding reality: it is no longer a question of misrepresentation of reality, but of hiding the fact that reality is not real, and therefore of saving the very principle of reality. Moreover, the designed space as a part of the revitalization was led towards maps of emotional values, shaping the space that arouses joy, delight and curiosity, presenting aggregations of positive feelings [8]. Moreover, the research showed that the methods of researching buildings most frequently used in the history of art and architecture, neither individually nor together, provide a full presentation of architectural space [9]. The selected criteria allowed for an in-depth study of the living space. Real space (traditionally understood residential buildings) can be found in G. Nawrot research, e.g., in the Market Square in Lelów [2, p. 161]. The simulacra space as an image of apparent reality is shown by G. Nawrot using the example of the railway station building, which was adapted in the 1990s as a residential building in Nowe Klejckuty [2, p. 162]. Another example of a simulacral living space is shown by G. Nawrot in the adaptation of a granary for residential lofts in Gliwice by Medusa Group as the existing connotation of the completed facility not adequate for the connotation of a residential building [2, p. 163].



Fig. 11. Real space, a traditionally understood railway station building (source – author)



Fig. 12. A simulacral residential space, a part of the railway station building adapted for residential purposes (source – author)

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Abstract: The aim in separating the architectural space is to create a structure to meet specific functional and aesthetic requirements; the construction of space can be done with the use of various methods and activities. The example of the Railway Station in Świebodzice forms a background for finding oneself in space and shaping the space in a multi-directional way. The author's aim was to examine the space of the railway station in terms of architectural and non-architectural criteria. Architectural factors were based on the criterion of the qualification of space relating to "activities determining the state of living," non-architectural factors were based on the criterion of qualifying space in the

context of "hyper-reality of state and place."

The method of logical argumentation was adopted for the research, interpreting reality on a selected example in order to understand the existing conditions.

The result is a graphic presentation of the floor plans layout in the living space with the simultaneous and linear performance of activities determining the condition of the apartment and the formation of forms of living in space in the context of the real and apparent (simulacra) image of the place of living.

The conclusions show the form of simultaneity or linearity in the analyzed architectural space as well as the case of shaping the space reflecting deep reality and the case of feeling the image of a space that distorts and conceals deep reality.

Keywords: renovation, simultaneous and linear activities, real and simulacra space

Streszczenie: PRZYWRÓCENIE DO ŻYCIA ROZWIĄZAŃ FUNKCJONALNO-UŻYTKOWYCH BUDYNKU DWORCA KOLEJOWEGO W ŚWIEBODZICACH. Dążeniem w wydzieleniu przestrzeni architektonicznej jest wykreowanie struktury przeznaczonej do spełniania określonych wymogów użytkowych oraz estetycznych. Konstruowanie przestrzeni może odbywać się z wykorzystaniem różnych metod i działań. Przykład Dworca Kolejowego w Świebodzicach stanowi tło do odnajdywania się w przestrzeni oraz kształtowania przestrzeni wielokierunkowo.

Celem autorki było zbadanie przestrzeni dworca pod kątem kryteriów architektonicznych i pozaarchitektonicznych. Czynniki architektoniczne oparto o kryterium kwalifikacji przestrzeni odnoszących się do „czynności określających stan mieszkania”, czynniki poza-

architektoniczne oparto o kryterium kwalifikacji przestrzeni w kontekście „hiperrzeczywistości stanu i miejsca”.

Do badań przyjęto metodę logicznej argumentacji, przeprowadzając interpretację rzeczywistości na wybranym przykładzie, w celu zrozumienia zastanych uwarunkowań.

Rezultat stanowi zapis graficzny ukształtowania rzutów w przestrzeni mieszkalnej z symultanicznym i liniowym wykonywaniem czynności określających stan mieszkania oraz ukształtowanie w przestrzeni form zamieszkiwania w kontekście rzeczywistego i pozornego (symulakrycznego) obrazu miejsca zamieszkiwania.

Wnioski dotyczą formy symultaniczności lub liniowości w analizowanej przestrzeni architektonicznej, a także przypadku ukształtowania przestrzeni odzwierciedlającej głęboką rzeczywistość oraz przypadku odczuwania obrazu przestrzeni wypaczającej i skrywającej głęboką rzeczywistość.

Słowa kluczowe: renowacja, czynności symultaniczne i liniowe, przestrzeń prawdziwa i symulakryczna